

INARRATIVE REPORT

FISHKUT, WILLOW CREEK & BENTON LAKE

Jan. 1 to April 30, 1947

FISH AND WILDLIFE SERVICE

U. S. DEPARTMENT OF THE INTERIOR

Charlo, Montana

I GENERAL

A. Weather conditions:

Table No. 1

Mo. & year	Snow.	Precip.	Max.	Min.
Jan. 1947	2.0	.09	52	-25
Feb.	3.0	.14	56	-27
Mar.	4.0	.30	65	-28
April		<u>T</u>		
Total	<u>9.0</u>	<u>.53</u>		
Jan. 1945	2.5	.01	55	-6
Feb.	8.5	.23	55	-23
Mar.	5.5	.31	65	-24
Apr.	4.0	.44	69	0
Total	<u>20.5</u>	<u>.99</u>		
Jan. 1945	9.0	.50	57	-5
Feb.	1.3	.11	61	-2
Mar.	1.5	.12	70	2
Apr.	<u>---</u>	<u>.20</u>	81	17
Total	<u>11.8</u>	<u>.93</u>		
Jan. 1944	<u>---</u>	<u>---</u>	57	8
Feb.	11.5	.28	51	-8
Mar.	11.0	.63	57	-9
Apr.	<u>---</u>	<u>.41</u>	76	23
Total	<u>22.5</u>	<u>1.32</u>		
Jan. 1943	18.5	.80	58	-44
Feb.	10.5	.38	64	-19
Mar.	3.5	.24	67	-25
Apr.	5.0	1.80	75	20
Total	<u>37.5</u>	<u>3.22</u>		
Jan. 1942	4.5	.16	56	-21
Feb.	9.0	.49	51	-24
Mar.	6.2	.34	67	2
Apr.	<u>---</u>	<u>.19</u>	80	11
Total	<u>19.7</u>	<u>1.18</u>		
Jan. 1941	1.5	.04	65	-14
Feb.	4.0	.20	66	-9
Mar.	T	.10	68	4
Apr.	.50 2.25	1.04	72	-12
Total	<u>6.0</u>	<u>1.40</u>		

Weather data is obtained from records maintained at the County Extension Office in Choteau, Montana. During January temperatures were below zero for 2 days at the beginning of the month, 3 days during the middle of the month and 2 days at the very end of the month. Sub-zero temperatures at the end of January lasted almost continuously up to February 10th. February 10th through 22 was a mild period with bright sunny days. February 23 through March 8 was another cold and storm period with 9 days of minimum temperatures ranging from -4 to -28 below zero. The -28 on March 5th was the coldest day of the period and in fact one of the two coldest days of the entire year. November 21st also had a minimum of -28.

At the time of this writing (May 6) April weather data has not yet been received from the observer in Choteau thus no information is yet available for April. This will be submitted as soon as it is received and the blank spaces in Table No. 1 for April 1947 can then be filled in. Generally speaking, the months of January, February and March were much colder and the winter was much more prolonged than for many years. Blizzards were numerous and cold but did not put much snow on the ground or make much moisture other than where it drifted. High drifts were very numerous throughout the entire area during the first 3 months. Runoff was very heavy during the last half of March and considerable damage was done to roads and bridges throughout the general area of these refuges. Total precipitation during the first 3 months of the period was .53 inches. The average precipitation for these 3 months back through 1941 is ~~.787.8~~ inches. If weather continues dry during April, precipitation for the period will be considerably below normal. For comparative data see table No. 1 on the preceding page.

B. Water Conditions:

Table No. 2 (Fishkum)

End of	1947	1946	1945	1944	1943	1942
January	4360.5	4364.7	4360.7	4361.1	4359.0	4361.2
February	4360.5	4364.8	4360.5	4361.0	4359.0	4361.8
March	4360.5	4364.8	4360.5	4360.7	4359.0	4361.0
April	4360.5	4364.5	4360.3	4360.1	4359.0	4367.0

Table No. 3 (Willow Creek)

January	4126.0	4123.2	4133.7	4130.3	4130.7	4104.0
February	4126.8	4123.6	4134.1	4130.8	4131.3	4105.7
March	4128.5	4124.1	4134.4	4130.4	4132.7	4107.9
April	4130.2	4124.6	4135.0	4130.1	4127.3	4110.0

Water readings on Fishkum Reservoir are taken by Mr. Fletcher Bosers and at Willow Creek by a Mr. Fritchey, both employees of the Sun River Irrigation District. These are submitted to the refuge

manager at the close of each month through the Reclamation Office in Fairfield Montana. The preceding tables will show that the level of Fishkum was constant throughout the period and not as high as it was for this same period of 1946 but averaged about the same as preceding years through 1942. Waterlevels at Willow Creek reservoir were higher this year than in 1946 but not as high as during 1945 during which year they were the highest levels ever obtained during spring months. It appears from the above table that considerable water must have flown into Willow Creek reservoir during March and April. Willow Creek has a steady in flow throughout the year but not large enough to raise the level of the reservoir as much as was raised during March and April unless runoff of melting snows in the mountain and foothill areas was extremely heavy, or supplemental water from the Sun River Diversion turned into the Willow Creek drainage. The refuge manager does not know which of these factors was instrumental in raising this water level as he was not in the area during this time, but is inclined to believe that the natural runoff was very heavy.

Potholes of the entire areas surrounding Fishkum, Willow Creek and Benton Lake refuges were all at over flow levels on April 1st. Benton Lake was reported to have approximately 2 sections of the main lake bed covered with water during the fore part of April and ditches and ponds in the upper end of the refuge were all full.

II WILDLIFE

The only visit made to these areas during the period was during January and at this time it was impossible to get out to the refuges because of snow conditions. As the areas are always froze up at this time of the year there would not have been any wildlife present anyhow. The only information received this spring on wildlife in the general vicinity of these refuges was through news paper articles. These stated that the Swan, Snow Geese, Canada Geese and duck flights during the first half of April were the largest seen in many years. Heaviest concentrations were in the Green Fields Lake and St Francis Lake areas. One news paper article carried a picture and story of Snow Geese dying at Priest Lake near Choteau. The refuge manager remembers when this happened at Priest Lake during spring migration about 20 years ago also, but has never seen or heard of its reoccurrence since then until this spring.

III REFUGE DEVELOPMENTS & MAINTENANCE

Nothing was done along these lines during this period.

IV ECONOMIC USE

During the January visit to these refuge areas the refuge manager made numerous contacts relative to grazing fees being paid and charged for grazing of cattle and horses in the general area. These were made

for the purpose of adjusting our economic use rates if found to be out of line with surrounding rates. Results of these investigations showed that when taking everything into consideration our rates were comparable with outside rates.

V PUBLIC RELATIONS

During the January visit to Choteau the refuge manager contacted the officials of the Teton County Sportsmen's Association relative to members of the association performing the work necessary in the construction of a new fence around the Fishkum Recreation Area. At the January meeting of the Association the club went on record as being in favor of doing this work and it was decided that the new fence would be constructed some time this spring possibly during May.

Completed May 6, 1947

Regional Office

Leon C. Snyder

Leon C. Snyder
Refuge Manager

ANNUAL SUMMARY
Fishkun, Willow Creek & Benton Lake

I GENERAL

A. Weather Conditions:

During May and the fore part of June temperatures were slightly under normal but normal or above during the balance of this period. Precipitation amounting to 7.49 inches was .12 inches below normal for May, June, July and August. Minimum temperatures during October November and December averaged considerably colder than preceding years and a tremendous amount of snow fell in the Fishkun and Willow Creek areas. 27 inches was reported at Fishkun during November alone but the official tabulation at Choteau for the entire period was 41 inches, which is comparable to 24.5 for 1945, 16 for 1944 and 37 for 1941 which are the greatest snow fall depths since 1940. Total precipitation for the period September through December was 5.26 inches or 2.25 inches above normal. Weather continued very cold during the last period of the year also except for a short mild spell during February. The break of cold weather came about March 10th. Coldest days of the year were November 21 and March 5 with temperatures of -28. There were 32 days of the year with temperatures ranging from -1 to -28. Total precipitation from May 1, 1946 to March 31, 1947 was 13.28 inches. (April weather data is not available at the time of this writing). Average yearly precipitation since 1940 is 11.99. Average for April since 1940 is .68 inches thus if April this year had a normal amount of precipitation the total for the year would be 1.95 inches above normal.

B. Water Conditions:

Maximum waterlevels at Fishkun and Willow Creek were reached during late May and early June. At Benton Lake spring and summer runoff water in the creek bed of the western portion of the refuge lasted up into August. Potholes of the entire areas surrounding the refuges contained water throughout the entire year, thus there was plenty of water to bring all ducks hatched in pothole areas to maturity. Benton Lake Refuge has about 2 sections of the main lake bed covered with water this spring besides having the creek bed and smaller ponds full in the upperend of the refuge.

C. Fires:

There were no fires on any of these areas during the entire year.

II WILDLIFE

As there is no refuge manager stationed on the refuges in this area and as visits to these areas are only 2 or 3 times a year, very little information on wildlife matters is known. When visiting the areas on August 29 a small raft of scaups, a few teals and 1 white Pelican were seen on Fishkun and about 500 pintails and a scattering

of mallards, teal and shovellers were noted on the Fishkum Basements. 8 Godwits and one dead Sora were also seen on Fishkum. The Sora should be added to the Fishkum bird list as I believe this is the first observation of soras on this refuge.

At Willow Creek on August 29th., 200 white pelican, 3 cormorant and about 1000 ducks were estimated. On June 3rd., 2 antelope, 3 coyotes and about 30 upland plover were observed on Benton Lake Refuge.

III REFUGE MAINTENANCE AND DEVELOPMENT

On the visit to Fishkum Refuge during late August and early September a new fence was constructed around the refuge headquarters buildings.

IV ECONOMIC USES

11 grazing permits were in operation at Benton Lake during the year, 9 for grazing totaling 1705 A.U.M.'s bringing in a revenue of \$702.20, one for harvesting of hay under which 36.91 tons of hay was harvested bringing in \$36.91 and one for agricultural uses bringing in \$20.00. Total revenue received from economic uses was \$758.91.

V PUBLIC RELATIONS

The refuge manager secured the promise of cooperation from the Teton County Sportsmen's Association in the construction of a new fence around the recreation grounds at Fishkum to be built sometime during this coming period.

During the latter part of August the refuge manager discovered an outbreak of botulism on Freezeout Lake near Fairfield Montana. This was reported by wire to Mr. Mushbach and Mr. Kenneth McDonald and instructions were received to contact local sportsmen's clubs and Fish and Game officials and clean up the dead birds. On September 6th the refuge manager with a delegation of 8 State Game officials and 3 or 4 local sportsmen picked up and barried 1669 dead birds involving 19 species. A complete report on this activity was submitted through the National Bison Range office on September 9.

Report submitted May 7, 1947

Leon C. Snyder
Leon C. Snyder
Refuge Manager

Regional Office

REFUGEE GRAIN REPORT

Refugee Indians Months of January thru April 1947

(1) VARIETY	(2) ON HAND BEGINNING OF PERIOD	(3) RECEIVED DURING PERIOD	(4) TOTAL	(5) GRAIN DISPOSED OF			(6) ON HAND END OF PERIOD	(7) PROPOSED USE		
				TRANS- FERRED	SEEDED	FED		SEED	FEED	SURP.
Wheat	35	1000	35	1000	1000	1000	35	1000	35	1000

(8) Indicate shipping or collection points shortland, New Guinea

(9) Grain is stored at service building, headquarters site.

(10) Remarks

REFUGEE GRAIN REPORT

This report should cover all grain on hand, received, or disposed of, during the period covered by this narrative report.

Report all grain in bushels. For the purpose of this report the following approximate weights of grain shall be considered equivalent to a bushel: Corn (shelled)--55 lbs., Corn (ear)--70 lbs., Wheat--60 lbs., Barley--50 lbs., Rye--55 lbs., Oats--30 lbs., Soy Beans--60 lbs., Millet--50 lbs., Cowpeas--60 lbs., and Mixed--50 lbs. In computing volume of granaries, multiply the cubic contents (cu. ft.) by 0.8 bushels.

- (1) List each type of grain separately: Corn, wheat, proso millet, etc. Include only domestic grains; aquatic and other seeds will be listed on NR-9.
- (3) Report all grain received during period from all sources, such as transfer, share-cropping, or harvest from food patches.
- (4) A total of Columns 2 and 3.
- (6) Column 4 less Column 5.
- (7) This is a proposed breakdown by varieties of grain listed in Column 6.
- (8) Nearest railroad station for shipping and receiving.
- (9) Where stored on refuge: "Headquarters grainary", etc.
- (10) Indicate here the source of grain shipped in, destination of grain transferred, data on condition of grain, unusual uses proposed.